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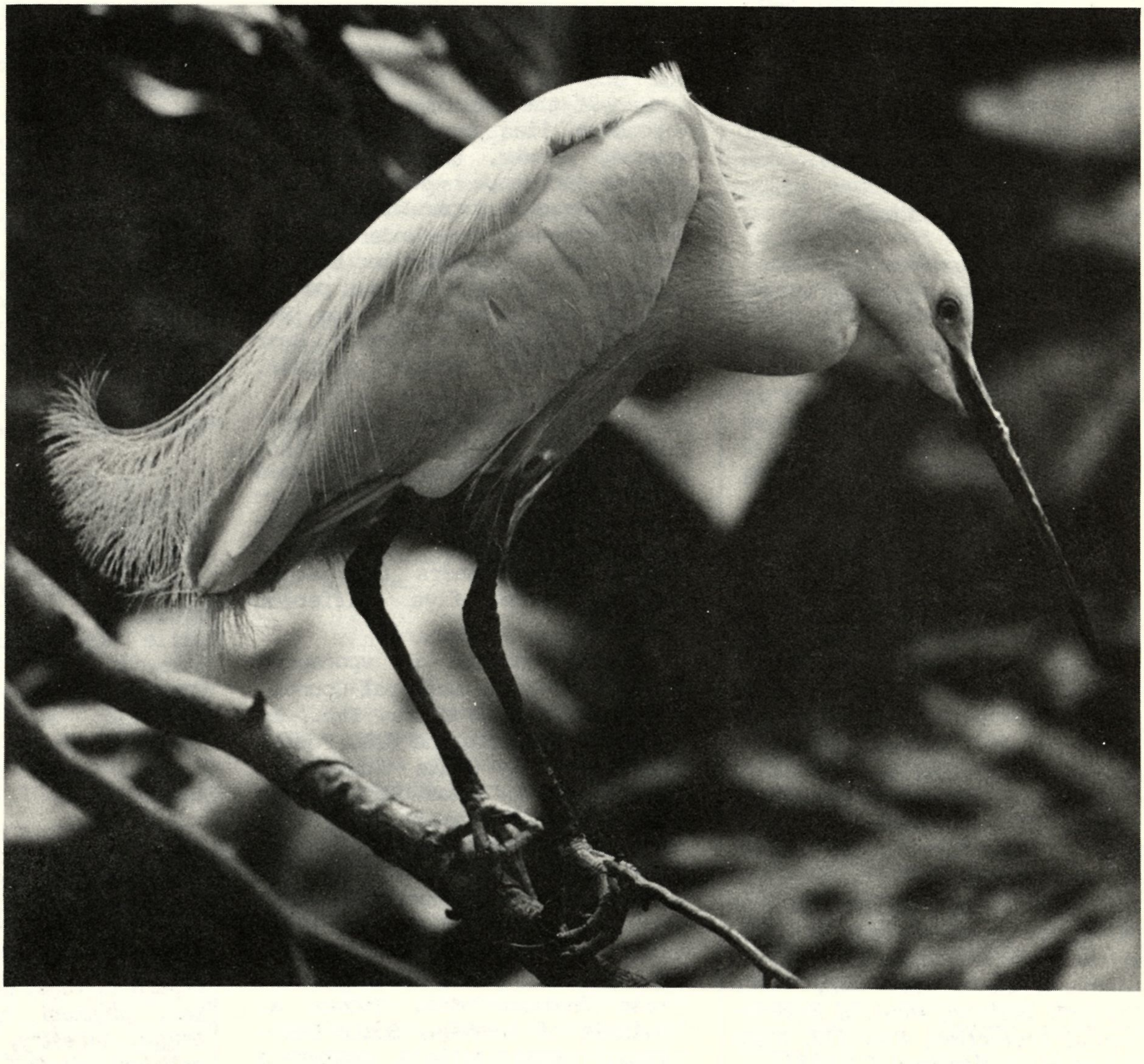

Citizens'
Bulletin
July/August 1981
Volume 8 Number 11 $3/yr.
Cover Photo: Leonard Lee Rue IV:
snowy egret

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Audrey Handleman photo

Governor cites poster winner

By Audrey Handelman, Environmental Intern

If the future of our environment lies in the hands of young people, then the future holds much hope. Julie Huard, a third-grader from Willimantic, demonstrated her understanding of the relationship between people and resources in a poster which she entered in the National Woodsy Owl-Smokey Bear Environmental Poster Contest.

Julie's poster, which displays the slogan "Don't Kill Trees!" and shows a stylized match and cigarette in the process of chopping down a tree, received national recognition along with winners from other grades from five different states.

The contest is sponsored annually by the National Council of State Garden Clubs, Inc., in cooperation with the U.S. Forest Service and State Foresters. Julie's work, submitted through the Annie E. Vinton Elementary School in Mansfield, competed initially with more than 200 entries from Connecticut, then won out over finalists from four other New England states. On April 22, 1981, National Contest Chairman Mrs. Thomas A. Swinnie of Andrews, South Carolina, named Julie's poster a national winner at the 52nd Annual Convention of the NCSGC in Atlanta.

According to Nancy Mellone, a member of the Federated Garden Clubs of Connecticut and Poster Contest Chairman, the contest's purpose is to promote awareness and understanding of the role played by natural resources in the economy of the United States. In addition, it is hoped that the contest will point out the relationship between good resource management and the quality of life and help equip people to participate in wise environmental decisions.

On May 29 Governor William A. O'Neill presented Julie with a "Citation for Outstanding Achievement" and urged her to remember its meaning and significance as she gets older. Julie was accompanied by her parents, Mr. and Mrs. Roland Huard; her teacher, Mrs. Ann Costello; and Poster Contest Chairman Nancy Mellone. Also present were Woodsy Owl and Smokey Bear. ■

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Creation of parks, museums, sculpture, filled inspiring later years of Anna and Archer Huntington

By John Waters

This is the third and final article in a series on the remarkable family whose members are recognized by and responsible for Connecticut's Collis P. Huntington State Park in Redding, Newtown, and Bethel.

The man Anna Hyatt married was everything a millionaire playboy is not. Intensely serious in purpose, but with a deadpan sense of humor, he devoted his life and fortune to furthering art, scholarship, and international understanding, working harder at it than most people work for a living. He founded more museums (15) than any man in America.

Archer Milton Huntington's interest in museums was born when he was twelve. His mother had taken him abroad to visit European museums as part of his education. At the National Gallery in London, he was so overwhelmed by the number and magnificence of its art treasures that he wished he could have a museum of his own. This wish stayed with him the rest of his life.

Later, a trip to Mexico introduced him to Hispanic civilization, which so fascinated him that it became the strongest driving force in his life. Already proficient in French, he mastered Modern Spanish and Old Spanish and later employed a tutor in Arabic because the language would be necessary for understanding Medieval Spain's 800 years of Muslim occupation.

To Spain, with love

Finally, he set out for Spain. By foot, stagecoach, mule, horseback, or rail, he covered every corner of the haunting, mysterious land. He talked to and studied the people he met on the roads and also established contacts with Spanish art lovers and scholars. After a second trip, he wrote a book about Northern Spain.

He revisited Spain again and again and became such an authority on Spanish poetry that he published his own verse translation of Spain's epic "Poema del Cid," about an Eleventh Century hero and soldier of fortune.

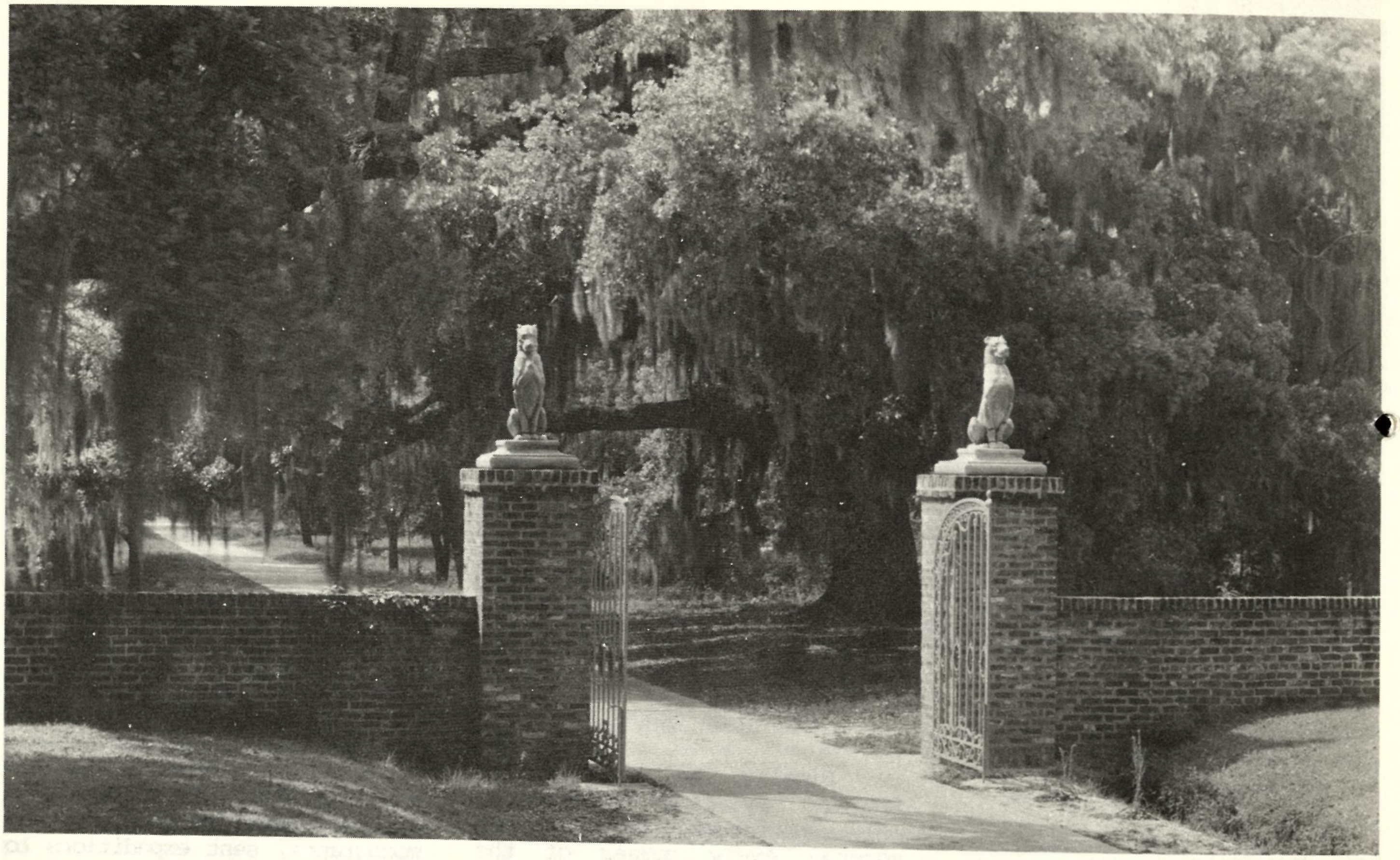
Museums, anybody?

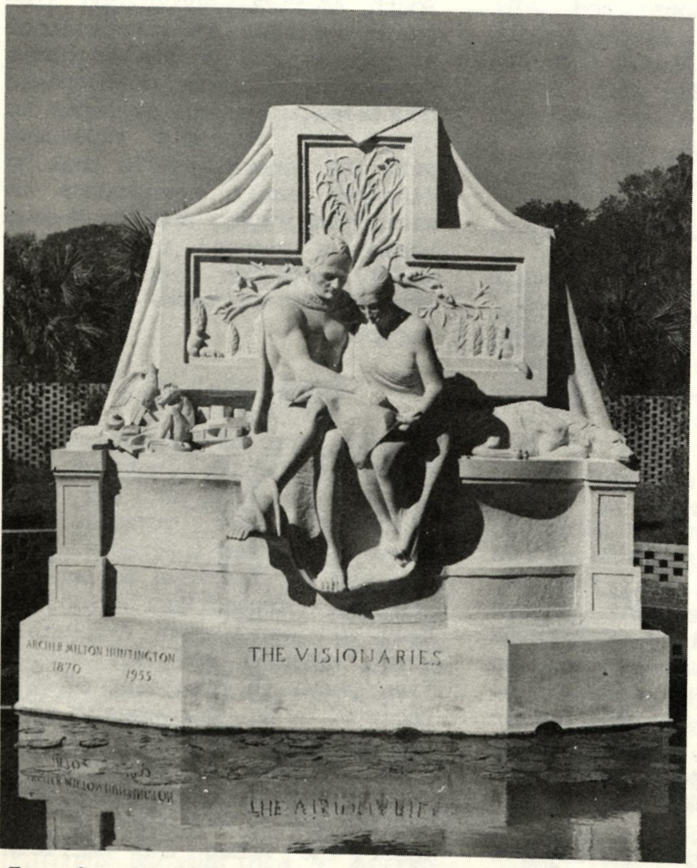
Unhappy because Hispanic civilization was so little known and appreciated in America, Huntington founded and endowed the Hispanic Society of America in 1904 to acquaint Americans with the arts, literatures, languages, histories, and institutions of Spain, Portugal, and other countries where Spanish or Portugese was spoken.

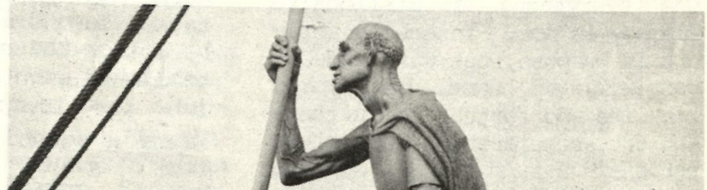
Then, achieving his boyhood ambition to have a museum of his own, he built the Hispanic Museum, stocked it with books and art from his own extensive collections, and gave it to the Hispanic Society. He traveled from one Hispanic country to another to find, buy, or borrow art and handicrafts for exhibitions at the museum. With his encouragement, the Society published Hispanic studies and monographs, sent expeditions to South America, encouraged Hispanic artists, and commissioned sculptures and medals to honor noteworthy citizens of Hispanic countries. He was so eager to share the Museum's treasures with the general public that he financed early experiments in microphotography, and the Museum became a pioneer in this now widely accepted method of reproducing rare books and manuscripts.

Coins and Indians

To surround the Museum with other worthwhile institutions, he donated land on the same block to four organizations whose activities interested him. One was the American Numismatic Society. Archer Huntington had been an avid coin collector since boyhood and had served five years as president of the society. He anonymously paid for erecting the Numismatic Museum on land he donated, and turned over his outstanding collection of 30,000 coins to it. Later, he added the American Geographical Society and the Museum of the American Indian to this center of culture.







Top; Great Danes at entrance gate of Brookgreen Gardens. Bottom left; "The Visionaries," an idealized depiction of Anna and Archer Huntington. Both by Anna Hyatt Huntington; photos courtesy of Brookgreen Gardens. Bottom right; Anna Hyatt Huntington working on Don Quixote statue; Joli Photographers, Danbury.

Financed Indian studies

Half a century before today's interest in Indians and their history, Archer underwrote--for thirteen consecutive years--the American Museum of Natural History's studies of primitive civilization in the Southwest. When a prehistoric pueblo was uncovered in New Mexico, he arranged to have it presented to the U.S. Government, which in 1923 designated it the Aztec Ruin National Monument. This interest in Indians led to his building and supporting the Museum of the American Indian, which is the largest museum in the world entirely devoted to the American Indian from the North to the South Pole.

Cheerful giver

At another time, due to his interest in Spain, he leased land near Seville for an archaeological dig at the site of an ancient Roman town. He presented the Roman glass, pottery, and metalwork treasures it unearthed to New York's Hispanic Museum.

When his mother died, leaving him 4,000 acres in Texas, he gave the land to the University of Texas, specifying that any income it produced from oil or gas leases or other sources be accumulated until there was enough money to pay for an art museum.

Archer had an activist streak in him that refused to allow the museums and libraries he assisted to become mere warehouses for pictures, sculptures, or books. He constantly pressed them to reach out to the general public with traveling exhibitions, films or books by specialists, lectures, or anything else that would raise the educational and cultural level of the country. A lover of knowledge and art himself, he was driven to share the wonderful creations of the human mind with those who knew them not.

Meanwhile, back at the Mansion

After her marriage to Archer Huntington, Anna Hyatt Huntington soon discovered that being a millionaire's wife can be a very demanding job. Their 1089 Fifth Avenue mansion across from Central Park at 90th Street was a magnet that attracted a procession of distinguished Spanish scholars, diplomats, prelates, and artists who had to be entertained. A large staff of servants had to be managed, and luncheons and dinners for large numbers of guests were not uncommon. All this took Anna away from her sculpturing and was very tiring. The Huntingtons had summer places in Westchester and also in Northern New York to which they could retreat from time to time, but these provided only temporary relief.

Adding to Anna's burdens, Archer's mother died in California, and the 60-room mansion at Fifth Avenue and 57th Street in New York, which originally belonged to Collis Huntington, had to be sold. (Tiffany's is there now.) Inventorying its furniture, tapestries, paintings, books, jewelry, and furnishings involved Anna and Archer in innumerable meetings with lawyers, appraisers, tax officials, and auctioneers. At the same time, Anna and Archer were giving up their mansion at 1083 Fifth Avenue and moving into a smaller home on the 89th Street corner. Archer gave the 1083 building to the National Academy of Design.

Three years later, the death of Henry Huntington, who was Archer's step-cousin but also his second step-father (Henry had married Archer's mother after Collis died), involved Anna and Archer in another burdensome job of settling a huge estate.

Tuberculosis

All during this time Anna had tried to keep up with her sculpture; but she grew rundown, and what had started out as a long series of colds was finally diagnosed as tuberculosis in 1927, when she was 51. Over the next seven years, in an effort to find a climate that would help Anna recover, the Huntingtons tried living in North Carolina, Spain, Switzerland, and Italy, with return trips to New York interspersed. All during this period, honorary degrees, awards, medals, prizes, and citations were piling up for Anna, although some awards had to be postponed because too much strain was involved. It was also during this period that they stumbled upon a piece of real estate in South Carolina that led them to embark upon the most original and delightful of their many philanthropic projects.

Docking at Georgetown, South Carolina, on a yachting trip, Archer--who was "into" conservation long before the present boom began--and Anna, who loved wild creatures, were enchanted by the lush vegetation of the coastal region, teeming with waterfowl and herds of deer. They bought a 7,000-acre tract of land, which included four old rice and indigo plantations. One of them, Brookgreen, had an avenue of live oaks and remains of a boxwood garden near the old plantation house.

Sculpture garden

Their first thought was to turn Brookgreen into a winter home, with some of Anna's sculptures displayed on the grounds and most of the land preserved as an unspoiled wilderness and refuge for wildlife. From there, it was but a step to visualizing it as a sculpture garden where the public could see America's best Nineteenth and Twentieth Century sculptures in an outdoor setting.

Anna drew a butterfly-shaped layout of walks and pools for the gardens, which included more than 500 plants native to the Carolina low country. Archer, recalling the decorative brickwork of Spain, built a serpentine wall to separate the gardens from the wilderness. He also built a museum for small sculptures.

The 350 sculptures large and small at Brookgreen Gardens include Anna's exciting "Fighting Stallions" at the entrance, "Youth Taming the Wild," "Diana of the Chase," "In Memory of the Work Horse," and the "The Visionaries." Best-known of the pieces created by other sculptors is James Fraser's touching "End of the Trail."

Brookgreen Gardens is on US 17, 18 miles south of Myrtle Beach, South Carolina, between the towns of Murrells Inlet and Pawleys Island.

Generous conservationists

The entire tract of about 10,000 acres, which the Huntingtons handed over to a non-profit foundation that Archer established and funded, is the fourth of a chain of wildlife preserves that they donated for public use. One of them--their old-age retirement estate in Redding--is described below. Another, a tract of 16,000 acres in the Adirondacks, which had been one of their vacation homes, is now used by Syracuse University's School of Forestry.

Still another adjoins the Mariners Museum at Newport News, Virginia, which Archer founded and dedicated "to the culture of the sea, its conquest by man, and its influence on civilization." Its man-made Lake Maury has become a rest stop for waterbirds migrating to Florida and South America. (At Newport News, when friends showed him the clubs of famous golfers, Archer suddenly realized that golfers had for centuries been whacking, slicing, hooking, or missing the little white ball, but no one had thought of a Golf Museum. So he founded one, even though the one and only round he ever played had been a comic disaster.)

Exodus

Even though Archer and Anna's new home on Eighty-Ninth Street was only a stone's throw from one of the pleasantest parts of Central Park, Anna had had her fill of New York. So Archer bought a large estate on a mountainside in Haverstraw, N.Y. It provided plenty of room for housing the bulls and bears that Anna used as models for the sculptures now in the Hispanic Museum. After a few years, however, they decided the location was not "country" enough, so Archer donated it to New York State as an addition to Palisades State Park.

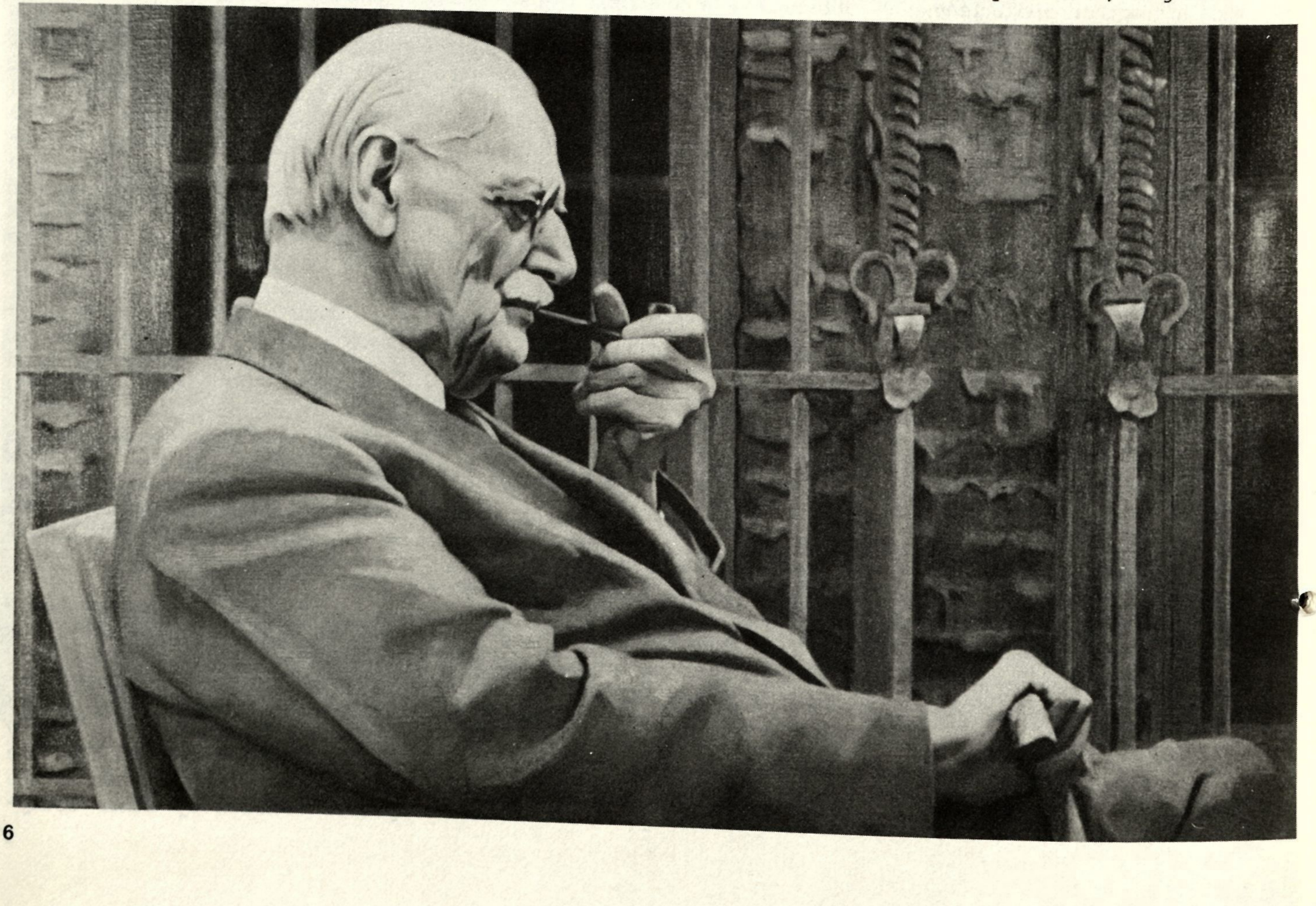
The promised land

Their next and final home was hundreds of acres of wild Connecticut countryside--the land that is now Collis P. Huntington State Park--along a high ridge in Redding, Newtown, and Bethel. They bought it in 1939 and named it "Stanerigg" (Scottish for Stone Ridge). Keeping most of it unspoiled as a wildlife refuge, they built a house and added a high-ceilinged studio for Anna's larger-than-life equestrian statues. The property included five lakes, woodlands, fields, and 14 miles of roads and trails built by an earlier owner.

Country people

Archer and Anna kept cows and horses and raised prize-winning show dogs. Pony-sized Scottish deerhounds were Anna's favorites, and at one time she

Archer M. Huntington, oil by Paul Meylan; courtesy of the Mariners Museum, Newport News, Virginia.



had forty. She liked to think of "Stanerigg" as a working farm and personally milked cows and cleaned the stables for many years.

An ardent believer in organic gardening, she posted a "Ban DDT" sign at the entrance. When she was 91, she told an interviewer how she had chased off a work crew sent to spray her trees with DDT. They said the government had sent them; but she threatened to stand in front of the sprayer and then sue for lots of money. That did it. They went away.

During World War II, Anna made "Stanerigg" the meeting place for neighborhood women who gathered there to make bandages for the Red Cross. Archer, still involved in philanthropic activities, had to go to New York frequently; nevertheless, he had plenty of time to exercise another of his remarkable talents: the writing of poetry of extremely high quality.

The last year

Severe arthritis and two cataract operations in Anna's early seventies failed to keep her from working as hard as ever. Even in her eighties, she rose at five, walked her powerful deerhounds, and climbed ladders 20 feet to upper scaffoldings around her equestrian sculptures.

She created two sculptures especially for Stanerigg: a pair of howling wolves and a bear group, which are still there. Ten other of her sculptures were on the estate, but after her death, they were shipped to Syracuse University in accordance with Archer's wish to have them there. (Archer died at the age of 85, in 1955, when Anna was 79.) They included a St. Francis of Assisi, a Joan of Arc, an Abraham Lincoln on horseback, and a Sybil Luddington on horseback.

A park is born

After Archer's death, Anna retained life use of Stanerigg. When she died at 97, in 1973, it went to Connecticut as the Huntington's gift to the state where Archer's famous stepfather had been born and where Anna and Archer had spent what were probably the happiest years of their busy, inspiring lives.

They specified that the 878-acre estate be kept as a wildlife sanctuary, and the Parks and Recreation Unit of DEP has honored this wish. (The park is open to the public for nature study, hiking, bird watching, picnicking, fishing, and cross-country skiing, but not for hunting or water sports.)

In accordance with their wishes, the park is named after Archer's stepfather, Collis P. Huntington, the railroad and shipping millionaire and art collector who had been born into starkest poverty only 30 miles away, in Harwinton, in 1821. (See our May 1981 issue for the story of his amazing career, our June issue for Anna's earlier years.) ■

"Youth Taming the Wild" is one of Anna Hyatt Huntington's works included in sculpture garden at Brookgreen Gardens in Murrells Inlet, South Carolina. Photo courtesy of Brookgreen Gardens.

Have the pleasures of boating without the problems of ownership

By Frank Glista, DEP Boating Safety Coordinator

If you enjoy watching the yachts and boats along Connecticut's shores or envy the sailors and canoeists on our many lakes and streams, take heart, mates -- the opportunity to enjoy boating on Connecticut waters is not limited to owners of boats alone. In fact, there may be advantages in not owning one. Boat ownership entails many responsibilities not the least of which is financial. Boat prices have skyrocketed in the past several years. Maintenance, storage, insurance and trailering are additional problems confronting the boat owner. Towing a heavy boat behind today's compact cars can result in damage to vehicles and increased hazards on the road.

The purpose of this article is to inform you of some of the many opportunities to enjoy boating without the problems associated with boat ownership. The possibilities are limited only by the time one has and the luxuries one can afford.

Perhaps the best boating bargain around is provided by the State of Connecticut. For 75 cents, a car and driver can cross the Connecticut River on the "Selden" between Chester and Hadlyme or on the "Cumberland" between Glastonbury and Rocky Hill. Additional passengers pay a 25 cent fare. The ferry service between Glastonbury and Rocky Hill is reported to be the oldest in the nation providing continous services dating back to colonial days.

If excitement is your goal. a Connecticut outfitter can provide an escorted, 30-day canoe trip on an Alaskan river for under $3,000 with everything provided. These extremes illustrate the range of services available in Connecticut. Listed below are some of the providers of boating fun for the adventurous:

Canoe rental, trips, paddling and white water lessons.

Dominick J. Ruggiero, Department of Economic Development

Clarke Outdoors	Rt. 7, West Cornwall, 672-6365
Great World	250 Farms Village Rd., West Simsbury, 658-4461
Main Stream	Rt. 44, Canton, 693-6353
Marine Land	120 Old Town Rd., New Milford, 354-3929
Needleloft, Inc.	180 W. Main St., Clinton, 669-8065
North American Canoe Tours	65 Black Point Rd., Niantic, 932-2504
Palmer Cove Marina	1023 Groton Long Point Rd., Noank, 536-6207
River Running Expeditions	Main St., Falls Village, 824-5574
Spicer's Marina	Shennecossett Rd., Groton, 445-9729
"U" Paddle Service	Gillette Castle State Park, Haddam, 739-0791

Boat rental, rowboats, motors, sailboats.

Over 1,000 boats are registered for livery service in Connecticut. Consult yellow pages for additional listings under "Boats, rental."

Bill's Boat Basin	365 Seaview Ave., Bridgeport, 336-9809
Brainerd's	172 Thimble Island Rd., Stony Creek, 488-6333
Brower's Cove Marina	Dubois Rd., Mason Island, Mystic, 536-8864
Colvin Yachts	Hammock Dock Rd., Westbrook, 399-9300
Housatonic Marina, Inc.	Sniffen's Lane, Stratford, 375-1840
Lighthouse Marina	23 Old Town Hwy., East Haven, 467-7325
Longshore Sailing School	Westport, 226-4646
Marineland	120 Old Town Rd., New Milford, 354-3929
Mason Island Marina	Old North Rd., Mason Island, Mystic, 536-9615
Needleloft, Inc.	180 W. Main St., Clinton 669-8065
Olsen Marine Co.	Stratford Marina, 375-5841
Palmer's Cove Marina	1023 Groton Long Point Rd., Noank, 536-6207
Shaffer's Boat Livery	Mason Island Rd., Mystic, 536-8713
Spicer's Marinas	916 Shennecossett Rd., Groton, 445-9729

Party boats (Head Boats) -- U.S.C.G. Licensed boats and captain.

Town/boat	Captain	Dock
Greenwich		
Delmar	John Minitti	Showboat Dock, 869-2836
Bridgeport		
Hurricane	Steve Seaman	Parsell's Dock 378-3240
Waterford		
Blackhawk II	Helen Hensley	Black Hawk Dock, 443-3662
Mijoy	Ernie Schiller	Mijoy Dock, 443-0663
New London		
Captain Bob II	Steven Basil	City Dock, 767-0315
Groton		
Hel-Cat	George Glas	Hel-Cat Dock, 535-2066

Charter Boats -- 6 or fewer passengers. U.S.C.G. licensed captains. Contact Connecticut Boatmen's Association, 739-9145, or:

Town/boat	Captain	Dock
Stratford		
Javelin	Don Bowman	Stratford Dock, 397-0396
Clinton		
Sea Sprite	Peter Wheeler	Town Dock, 669-9613
Mariner III	John Ames	Cedar Island, 669-7395
Old Saybrook		
Searuff	Phil Larson	Old Saybrook, 828-3443
Grumpa II	Tom Wadsworth	Hull Harbor, 388-5132
Niantic		
Privateer	J.W. Dietrich	Boats, Inc. 739-8630
Waterford		
Sunbeam/Sunbeam IV	John Wadsworth	Captain John's, 443-7259
Makaira	Bill Cramer	Waddy's Dock, 467-2297
Sayonara II	Bob Coniglione	Waddy's Dock, 523-5942
Holy Mackerel III	Bill Martin	Waddy's Dock, 739-9276
Dixie Belle	Bill Vargus	Captain John's, 447-0213
Dot-E-Dee	Jack Douton	Captain John's, 739-7419
Jo-Sea	John Collomore	Captain John's, 347-2531
Skipjack	Harry Trueblood	Captain John's 739-8460
Chopper	Steve Zane	Waddy's Dock, 871-0496
Osprey	Joe Wysocki	Waddy's Dock, 238-2095
About Time	Ed Lorence	Waddy's Dock, 246-8836
Gypsy II	Jim Marcella	Captain John's, 739-0603
My Sweet Lady	Paul Ward	Captain John's, 739-5747
Artist	Frank DePietro	Waddy's Dock, 563-5533
New London		
Lady Margaret	Claude Adams Jr.	Marster's Dock, 635-5881
Pamgara	Paul Andriewicz	Marster's Dock, 443-3919

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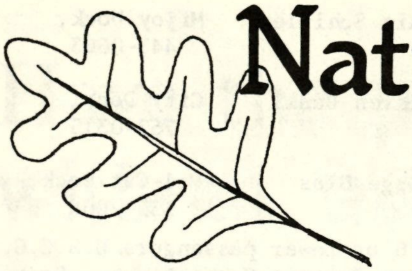
Nature Notes



by Penni Sharp

Tall, handsome members of heron family may be seen at shores, marshes

Summertime provides many opportunities for observing birds as it is a time when people enjoy being outdoors, particularly near the water. Boaters, swimmers, and others who frequent fresh and salt water shores may catch sight of a variety of birds at water's edge. Included among these are the striking, long-legged members of the heron family, many of which nest in or visit Connecticut during summer.

Herons and bitterns belong to the family Ardeidae, which includes over 60 species of birds. Members of this family are long-necked, long-billed, long-legged birds with large wings. Anyone who has observed herons in flight has probably noticed that they hold their necks in an "S" shaped curve. This is due to the fact that their neck vertebrae are of different lengths.

Herons are cosmopolitan birds, meaning that they are found on all the continents of the world. They feed chiefly on animal food, most of which is aquatic. The heron diet includes fish, amphibians, crustaceans, insects, and reptiles.

Many of the herons display elaborate plumes during the breeding season. They are also known for their powder downs. These are unusual feathers that are never shed but continue to grow throughout a bird's life. These feathers wear at the tip into a powdery substance that is used by the birds in removing dirt and grease from their feathers. Once they have cleaned their feathers with powder down, herons will waterproof them using oil from the uropygial gland.

In Connecticut, quite a number of the members of this bird family can be seen during summer months. Perhaps the most striking of all is the majestic great blue heron.

The great blue heron (Ardea herodias) is the largest and probably the most ubiquitous of the American herons. It is bluish gray with a yellow bill and mostly white head. The stately presence of the great blue heron when poised motionless at water's edge has made it a popular subject for artists and photographers. The great blue can remain still for a seemingly endless time, concentrating on its search for prey. A quick dart of the head and strike of the bill and a small fish or frog is seized. The vigil is then resumed. Even in flight, the great blue maintains its dignified appearance as it moves with slow, deliberate flaps of its large wings.

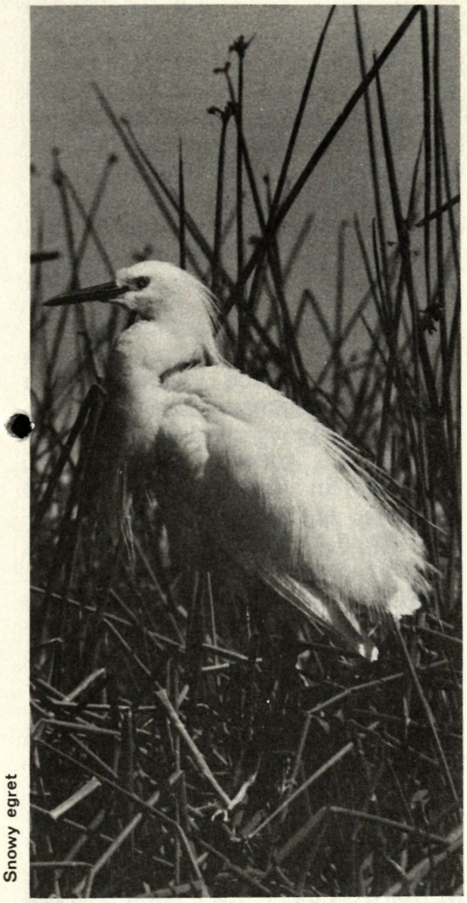
The great blue heron is a migratory species. During mild winters, a few stragglers may remain in Connecticut; however the herons usually winter further to the south and return to their breeding ranges early in the spring. Courtship among the great blue herons is a spectacular event in that a number of herons may congregate. A ritual dance is performed by the herons, who move around one another in a circular pattern with wings outstretched. Occasionally, males will fight each other in a contest over a particular female.

Great blue herons nest in colonies and prefer to locate their nests in trees where available. The nests are large platforms constructed of sticks and only slightly hollowed. They appear to be rather precarious structures for the hatching of eggs! Both male and female birds incubate the pale green eggs which usually number four to five and hatch in about 28 days. The young birds are helpless and ungainly. They are tended by both parents who feed them soft regurgitated food initially and later bring them solid food which is deposited in the nest. If undisturbed, the young will remain in the nest until they reach adult size.

Great blue herons can be found along the shores of ponds, lakes, and streams and in marshes throughout Connecticut.

A smaller, equally graceful member of this family is the snowy egret (Egretta thula). This snow white bird is distinguished by its black legs and startling yellow feet. During the breeding season, long delicate plumes extend down its back. In the 19th century,

Great blue heron: Leonard Lee Rue III photos



Snowy egret

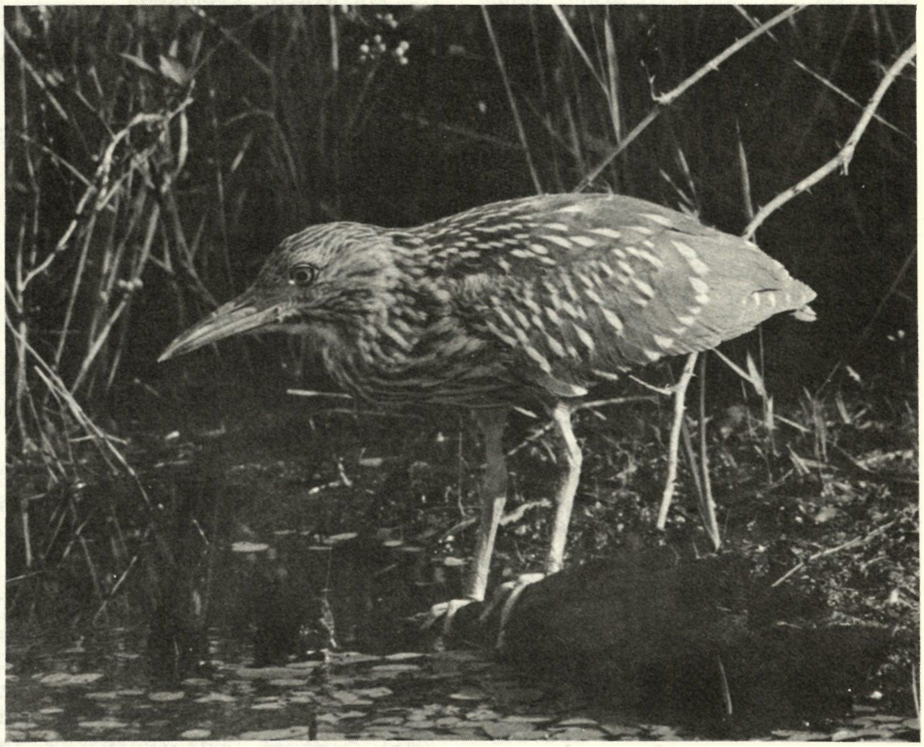
these plumes were much sought after for the millinery trade, and snowy egrets were brought to the edge of extinction. Fortunately, they were afforded protection in time and have since increased their numbers.

During courtship, snowy egrets display their plumes to attract and later to greet a mate. The crest on the head and the plumes of breast and back are elevated and spread, and the wings are held open. Males become quite aggressive, and spats are common.

Like the great blue heron, the snowy egret is a migrant and a colonial nester, and it too builds a stick nest of rather flimsy construction. Four to five bluish green eggs are laid, and both parents share in the incubating. Eggs hatch in 18 days. The young are fed regurgitated food and after several weeks leave the nest to perch on twigs of a nearby branch during the day, returning to the nest at night.

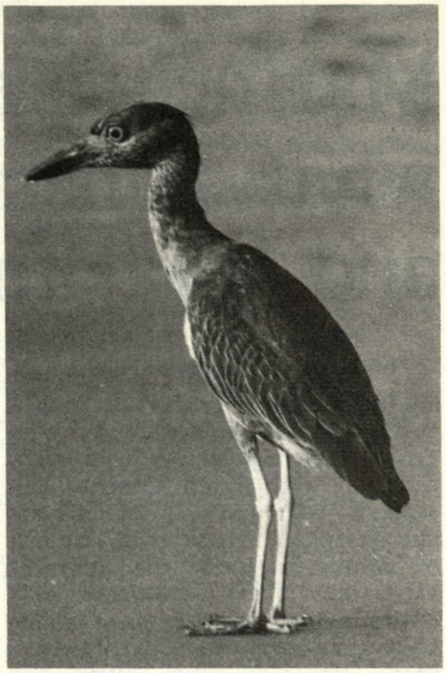
Snowy egrets are most likely to be seen around salt marshes where they can be observed actively searching for minnows and small crustaceans.

Two night herons can be seen in Connecticut, the black-crowned (Nycticorax nycticorax) and the yellow-crowned (Nycticorax violacea). The black-crowned night heron is a medium-sized, stocky bird. The crown of its head and back are black, wings gray, and underparts white. It has a thick, dark bill, yellowish legs, and a red eye. During the breeding season, white plumes extend from the back of its head. The yellow-crowned night heron, more solitary and not as common in Connecticut, is less stocky than the black-crowned. A black head, marked by an off-white or yellowish crown and white cheeks, helps to identify this bird. The yellow-crowned has a gray body. Immature birds of both these species are brown and heavily streaked. They are difficult to distinguish, but the yellow-crowned has longer legs and a heavier bill.



Black-crowned night heron

As the name implies, the night herons are active at night, feeding mostly at dusk and after. However, it is not unusual to see them during daylight hours.



Yellow-crowned night heron: Irene Vandermolen photo

Both species are colonial nesters, although the yellow-crowned night heron will nest singly. They are often found in rookeries with other species of herons. From three to six pale blue-green eggs are laid and incubated for 21 dyas. The young usually leave the nest a month or so after hatching, but are not strong fliers until they are around eight weeks old.

Night herons are migratory, and young birds will frequently

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Marine fishing surveys: what fishermen sought... ...and what they caught

Early in 1978 the National Marine Fisheries Service instituted a national marine recreational fishing survey through a contract with Human Sciences Research, Inc. (HSR). The survey was designed to estimate numbers of marine anglers, the composition of their catches, and related data for use in fisheries management nationwide. State agencies were given the option of conducting a field interview portion of the study, and DEP's Fisheries Unit elected to conduct these interviews as well as collect additional data via volunteer fishermen's logbooks, observations of recreational fishing in State Parks, and aerial flights to estimate levels of angler activity. A recently completed progress report on the national and State surveys, prepared by Robert F. Sampson, Jr., DEP Fisheries Biologist, offers a compendium of information on saltwater angling in Connecticut. This is the second of two articles excerpted from the report.

* * * * *

Seasonal distribution of target species

Over 30 species of fish were observed by Connecticut field interviewers during 1979, 11 of which were consistently reported as target species throughout the year. The amount of fishing effort expended on these species varied with seasonal changes in species availability. Of the 14 most frequently sought species in Connecticut, all except winter flounder, blackfish, and tomcod are migratory. The remaining 11 species are found in our waters from two to as many as six or seven months during the year. In addition to the common species, Connecticut anglers with larger boats or those hiring charters also seek out such big game species as shark, marlin, and tuna.

Winter flounder is reported as the most popular fish species in Connecticut waters. This species is sought year around despite seasonal changes in availability. In the spring and fall a great deal of effort is expended with high success in pursuit of this species. Its high quality flesh and easy "catchability" makes flounder very desirable.

Marine species fishermen report most often sought

1. Winter flounder
2. "No particular species"
3. Bluefish
4. Blackfish
5. Striped bass
6. Scup
7. Fluke
8. Tomcod
9. Snapper bluefish
10. Mackerel
11. Weakfish
12. Cod

Nearly eight million salt water fish of more than 30 species were taken by Connecticut anglers during 1979. Eleven species were commonly taken of which winter flounder, bluefish, mackerel, fluke and striped bass were consistently sought and caught.

When anglers were asked, "Are you fishing for anything in particular?" "No species in particular" or "anything we can catch" was the second most frequent response (10-30 percent of monthly totals). The remaining annual ranking of species in order of directed fishing effort was: bluefish, blackfish, striped bass, scup, fluke (summer flounder), tomcod, snapper bluefish, mackerel, weakfish, and cod. Fish such as snapper (young of the year) bluefish and mackerel ranked relatively low due only to their extremely short seasonal availability. Pressure on these species is intense; however it exists for only a few months each year.

Seasonal and temporal distributions of local and migratory fish stocks give Connecticut anglers varying species to fish for through the year. For example, from November through May, 50 to 100 percent of the anglers interviewed both on shore and aboard boats concentrated their effort on winter flounder. While intensive boat fishing for flounder continues into June, most flounder have left inshore bays and estuaries by this time and are not generally accessible to shore-based fishing. For this reason, both flounder catch and effort decline, although naive anglers continue to seek this species. The lowest seasonal catch and least effort directed at flounder occurred during August, when bluefish, fluke, and scup accounted for most fishing activity. During fall and winter, these latter species leave Connecticut waters, while flounder move inshore and again become accessible to shore-based as well as boat-based fishing.

Angling effort directed towards bluefish is greatest from boats, and fishing pressure increases rapidly as these fish enter the Sound in late June. The peak of bluefish activity occurs during August when 50 percent of the anglers on boats interviewed were after bluefish. By late September or October effort drops despite continued availability of this fish. At the same time anglers fishing from shore target their effort towards snapper bluefish.

Blackfish are most accessible to sport fishing during spring and fall, both to shore and to boat-based anglers. The peak of seasonal effort occurred during June when 15 percent of the overall angling effort was directed towards this species. Blackfish are also vulnerable to angling during October when they congregate in large numbers around deep water reefs and in shoal areas.

Striped bass, scup, and fluke are all target species for anglers from May through October, when between five and ten percent of all anglers interviewed were seeking these species. The shore-based fishery directs little effort at scup or fluke, although small fish are often taken from shore.

Striped bass are sought by about five percent of all shore-based anglers interviewed during June, October, and November. In the Thames River estuary, shore-based striper fishing is particularly popular from November through May with effort during mid-winter occasionally reaching the 100 percent level. This fishery is well known among veteran striper anglers, many of whom will venture out after these fish during periods of frigid temperatures.

Tomcod, like snapper bluefish, are seldom taken by the boat fishery, largely because their seasonal availability does not coincide with that of the boat fishery. Next to flounder, tomcod are the most important winter species to shore-based anglers and are sought by over 25 percent of those fishermen. Both their availability and their importance diminish rapidly in the spring as flounder fishing improves.

Mackerel are very important to the boat-based fishery during a three- to six-week period from May to mid-June and sporadically throughout the summer and fall. On days during their peak availability (one or two weekends per year), 50 percent or more of the boat-based fishing effort may be targeted towards mackerel. Shore-based anglers seek this species 19 percent of the time during that same period of peak abundance; however, many private boats are not operating during the period when these fish are most easily taken from Block Island Sound. Although two party boats sampled during this period were on cod fishing grounds only 25 percent of the anglers interviewed were after cod or pollock. The remaining 75 percent were after anything they could catch. Extreme distances to offshore fishing areas appears to be the limiting factor on cod fishing although pollock are available to eastern Connecticut anglers during April in the area between Fisher's Island and Plum Island, New York (The "Race").

Angler catch

The NMFS national survey reported that 7.8 million fish of all species were caught by anglers fishing in Connecticut during 1979. The greatest reported catches were for bluefish and scup (2.0 million and 1.9 million fish, respectively). The third through sixth ranked catches were: winter flounder, 1.3 million; cunner, 705,000; blackfish, 423,000; and mackerel, 254,000. (Cunner are not a target species in Connecticut. Most fishermen consider them either a trash fish or a simple nuisance since they frequently steal bait.)

DEP's interview results, which illustrate catches per unit of effort for the major species, were reported in numbers of fish per 100 hours of fishing effort. During September 1979, adult bluefish were taken at a maximum rate of 30 fish/100 hours in the private/rental boat mode, and 400 fish/100 hours in the charter and party boat mode. Snapper bluefish were taken by shore-based fishermen at a maximum rate of 350 fish/100 hours during August. Annual peak winter flounder harvests took about 110 fish/100 hours from boats during May and June, and 170 fish/100 hours in November from shore.

Scup catch rates were less than 10 fish/100 hours from shore, since the species is relatively unavailable to shore-based anglers. The peak of 180 fish/100 hours for scup occurred during September for the boat fishery. Catch per effort among all other species was generally less than 30 fish/100 hours, particularly for shore-based fishing.

During both 1979 and 1980, approximately 42 percent of interviewed anglers caught no fish. This percentage varied by month and sampling mode. On certain days, anglers with no fish made up 100 percent of those interviewed. Private/rental boat anglers experienced fewer "no catch" days, and no charter/ party boat intercepted ever reported a wholly "no catch" day.

Private or rental boat fishing is generally the most productive in catches per unit of fishing effort on a year-round basis. With one exception, boat fishing always produced greater numbers of fish per hour than shore-based fishing. The shore fishery catch rate exceeded the boat fishery during August 1979 due to the dominance of snapper bluefish catches during this month. Catch per unit of effort for those fishing from beaches and banks was generally the lowest of all. (These trends closely parallel those of a survey conducted in Rhode Island during 1978.)

The snapper bluefish, although available for only three months each year, was observed most frequently by DEP interviewers. Winter flounder, scup, and adult bluefish were the second, third, and fourth most frequently encountered species. Data from the national survey differed in the ranking

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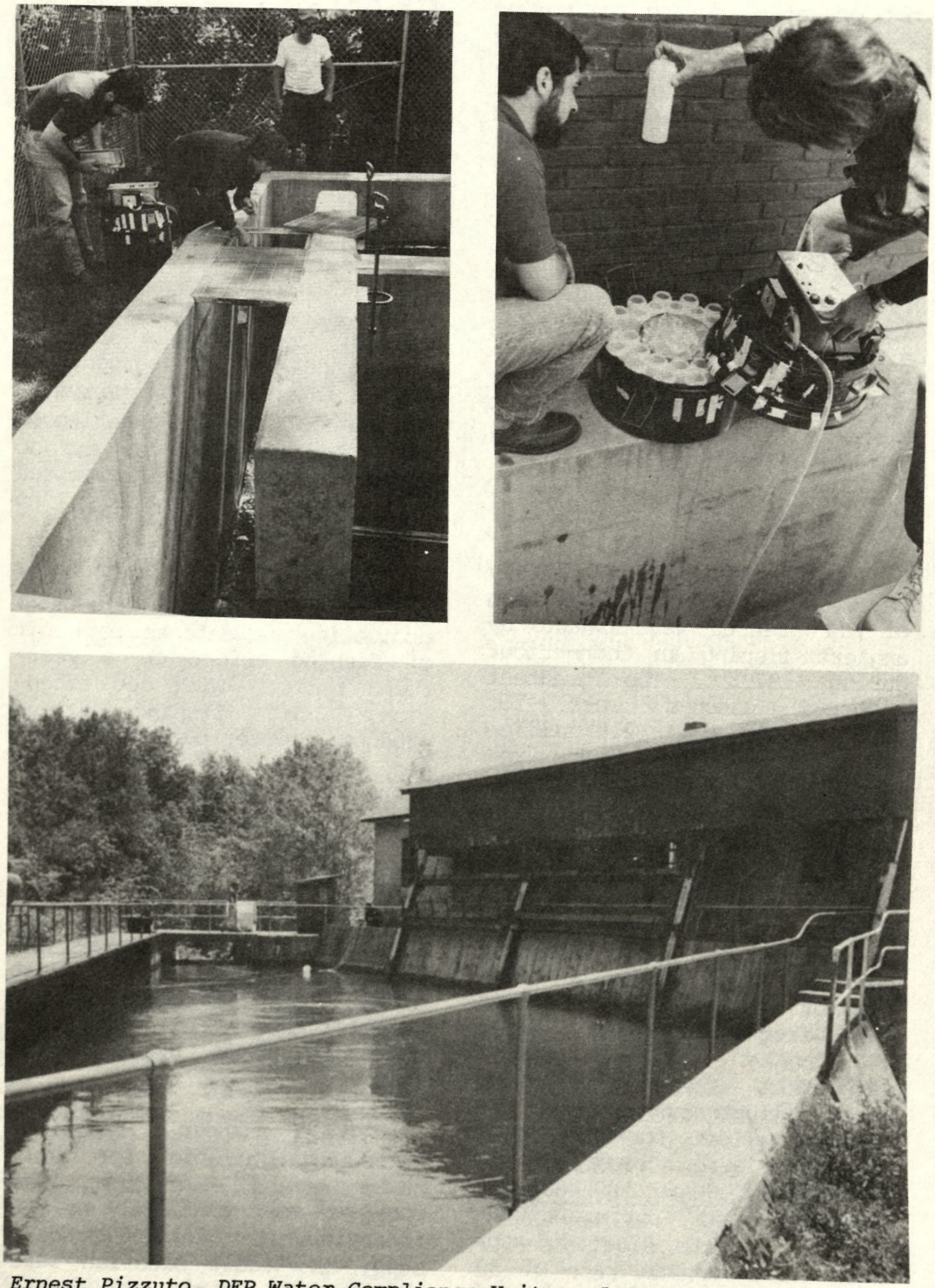
Study checks effects of phosphorus removal on Housatonic system

By Tess Gutowski and Charles Fredette, DEP Water Compliance Unit



Ernest Pizzuto, DEP Water Compliance Unit, and Dan Granz, EPA Surveillance & Analysis, set out sampling equipment at Norfolk sewage plant as Douglas Crunden watches; at Canaan plant; and at Housatonic lock.

A two year study examining the relationship of Massachusetts' wastewater discharges to the Housatonic River's eutrophication problems was initiated this May in a combined effort by Connecticut, Massachusetts, and the U.S. Environmental Protection Agency. The study will provide information which will assist in evaluating the following:

(1) The phosphorus loading characteristics of the Housatonic River mainstem near Lake Lillinonah during summer months.

(2) The relationship between summertime mainstem phosphorus loadings and point sources in Massachusetts.

(3) Changes observed in summer mainstem phosphorus characteristics when phosphorus is removed from Massachusetts point sources.

(4) The relative significance of summer mainstem phosphorus loadings in comparison to summer loadings from the Still and Ten Mile Rivers.

(5) Summer phosphorus loading characteristics during summer storm events.

The two-year study will be conducted so as to contrast conditions with and without phosphorus removal at Pittsfield, Massachusetts. River samples will be collected from May through August 1981 without phosphorus removal at Pittsfield and from May through August 1982 with phosphorus removal at Pittsfield. Five stations along the river have been selected to test for total phosphorus, dissolved phosphorus, and laboratory algal growth potential. At the same time that river samples are collected, sewage treatment plant effluents in Connecticut and Massachusetts will be monitored to determine their phosphorus contributions to the river system.

Conducting the study in 1981 without phosphorus removal at Pittsfield has two advantages. First, if 1981 data shows that summertime mainstem phosphorus loads are obviously insignificant, the 1982 study may not be necessary. Second, the Connecticut DEP is conducting a concurrent 1981 intensive survey of Lake Lillinonah which will document the benefits to be accrued from Connecticut point source controls alone, in the absence of point source controls in other states. This information will be valuable in assessing the need for the 1982 study, and in evaluating 1982 study results.

This latest study is an outgrowth of previous investigations of the Housatonic River eutrophication problem. During the past 15 years, the State of Connecticut has conducted an extensive series of scientific and engineering studies on Lake Lillinonah, Lake Zoar, and Lake Housatonic algal and weed problems. Major contributions to this effort have been made by the Connecticut DEP, the Connecticut Agricultural Experiment Station, EPA National Eutrophication Survey, the EPA National Enforcement Investigation Center, and FMC Corporation.

Previous studies have documented highly eutrophic conditions in the lakes, and public complaints have underscored the unacceptability of these conditions. It has been clearly established by laboratory and field studies that phosphorus is the plant nutrient which governs the density of algae in the lakes. It has also been demonstrated that a reduction in phosphorus concentrations will yield a corresponding reduction in algae biomass. It has been determined that phosphorus enrichment of the Housatonic lakes is not confined to certain localities, but rather is the result of enrichment of waters throughout the entire river basin. On an annual basis, approximately 55 percent of the phosphorus load to the lakes is contributed by sources above New Milford, primarily sources in Massachusetts. Consequently, control of phosphorus enrichment requires the development of basin-wide strategies.

Previous studies have indicated that phosphorus removal at significant sewage treatment plants in Connecticut will yield significant improvements in lake conditions. Consequently, the municipalities of Danbury, Bethel, and New Milford are presently implementing phosphorus removal in accordance with their NPDES permits. In addition, water quality modeling analyses conducted by the Massachusetts Department of Environmental Quality Engineering - Division of Water Pollution Control indicate that phosphorus removal at major Massachusetts point sources, including the Pittsfield Wastewater Treatment Plant, could yield a substantial reduction in the phosphorus loading to Connecticut waters. The 1981/1982 field study should confirm these model predictions. ■

Regional task force reports on acid rain

There is substantial evidence that acid rain in the Northeast is a serious threat to the environment and public health, according to recent findings of a regional task force of state environmental officials.

Both the coalition's *Northeast Damage Report of the Long Range Transport and Deposition of Air Pollutants* and a slide/tape show, "A Cause for Alarm--Acid Precipitation in the Northeast," reveal startling news about the long range transport of air pollutants into the Northeast. Acids, heavy metals, and even pesticides, are transported from remote sources by prevailing weather patterns and are deposited onto land and water throughout the region.

According to the report, acid precipitation leaches nutrients and metals from soil and in some areas is linked with decreasing forest productivity, polluted drinking water, and the killing of fish. Evidence also associates atmospheric pollutants with respiratory and cardiovascular diseases due to the inhalation of fine sulfate particles and aerosols.

The 75-page technical report and the 26 minute slide/tape show are a joint effort of the New England Interstate Water Pollution Control Commission (NEIWPCC) and the Northeast States for Coordinated Air Use Management (NESCAUM). These organizations represent state water and air pollution control officials in the New England States and New York State; New Jersey is also a member of NESCAUM .

The air and water pollution control officials are united in their concern, and they feel the evidence is sufficient to call for reducing the emissions of pollutants that cause acid rain.

Both the damage report and the slide/tape presentation show that accelerated deterioration of buildings and loss of visibility are also tied to the long range transport of air pollutants.

Copies of the damage report are available free of charge from NEIWPCC, 607 Boylston St., Boston, MA 02116, (617) 437-1524. Copies of the slide show may also be purchased through the NEIWPCC. The slide show is available on loan from DEP's Information and Education Unit, 566-3489; copies of the report are also available. ■

At sea without a boat

From page 9

West Wind II	Cecil Brooks Jr.	Marster's Dock, 526-9453
Scorpion	Larry Hample	Marster's Dock, 443-2919
Sea Nymph	Richard Meek	Marster's Dock, 739-7926
Nancy B	Howard Beers	Marster's Dock, 434-1087
Seon	Peter Casio	City Pier, 442-7193
White Lightning	Ted Harris	Marster's Dock, 443-8636
Carole C.	Don Cuddyer	Marster's Dock, 443-6357

Noank

Skip Dot V	Leonard Rising Jr.	Noank Shipyard, (413)786-0517
Reelin	Ernest Celotto	Noank Shipyard, 536-1742
Blues Brothers	Al Sulla	Palmer's Grove, 887-1105
Seaweed Two	Gregory DeBrule	Noank Shipyard, 536-1665
Anna R	Ben Rathbun	Rathbun's Dock, 536-8372

Ferry boats

Bridgeport-Port Jefferson Ferry	Union Square, Bridgeport, 367-8571
Chester-Hadlyme Ferry	526-2743
Cross Sound Ferry Service	New London, 443-5281
Fishers Island Ferry	State St., New London, 443-6851
Glastonbury-Rocky Hill Ferry	563-9758
Interstate Navigation Co.	2 Water St., New London, 442-9553

Cruises: 1 to 7 days

New England Steamboat Line Steamboat Landing, Haddam, 345-4507
Day cruises to Sag Harbor;
Three-hour evening Jazz Cruises;
Seven-day New England Cruise

Deep River Navigation Co.,
Main St., Centerbrook, 767-1440
Connecticut River boat trip combined with steam train ride.

Mystic Seaport, Greenmanville Ave., Mystic, 536-2631
Short sight seeing cruises aboard the coalfired, steam-powered "Sabino."

Mystic Whaler, 7 Holmes St., Mystic, 536-4218
One to five day cruises

Liberty Belle, Long Wharf Pier, New Haven, 562-4163

Lady Joan, Calf Pasture Beach Rd., Norwalk, 838-9003 ■

Herons: tall and handsome

From page 11

move out in all directions from their nesting grounds in search of new territory prior to the annual southward migration.

Bitterns differ from other members of the heron family in several ways. In appearance, they have shorter legs and bills. They are solitary nesters and place their nests on or near the ground. Bitterns inhabit salt or freshwater marshes and are difficult birds to see. They are reluctant to fly, and when disturbed, assume a posture with their necks extended and bill pointed skyward. With their protective coloration, they become next to impossible to spot. On a breezy day, they will even sway with the wind, thus blending in with the waving reeds of the marsh.

The American bittern (Botaurus lentiginosus) is a medium-sized, brown streaked heron with black markings down each side of its throat. It is similar to the immature night herons; however it is a more secretive bird. The black throat markings are a help in identifying the bittern.

American bittern

Bitterns may be heard more often than seen. During courtship, males emit a strange assortment of mating calls. These odd sounds can carry for half a mile and have given the bittern the names "thunder pumper" and "stake driver."

The female bittern builds the nest, often choosing a dense clump of cattails. The new spring growth of the cattails coincides with the hatch of the young, giving added protection to the vulnerable chicks. From three to seven brownish eggs are laid, incubated by both parents and hatched in 28 days. The young remain in the nest for several weeks and are fed a diet of regurgitated food. By eight weeks they are ready to fly.

The members of the heron family are interesting and handsome birds. When you are near the water this summer, be it marsh or shore, keep a lookout for one or more of these tall wading birds. ■

Decline of the Bobwhite tied to farming practices

By Peter Bogue, Supervisor, Wildlife Recreation Management, DEP Wildlife Unit

In New England the bobwhite is commonly referred to as "quail" and should not be confused with its woodland counterpart the ruffed grouse or "partridge." This bird is commonly recognized by its whistle, a clearly enunciated "Bobwhite" or "Poor Bob-Whoit."

The bobwhite (Colinus virginianus) is one of the order Galliformes, which are birds described as chicken-like with feet adapted for scratching. The bobwhite is much smaller than its game bird associates, the ruffed grouse or ringneck pheasant. Many people in the East think the bobwhite is the only quail residing in the United States. However, there are ten (10) distinctly different quail genera native to North and Central America. Five of these have the largest parts of their ranges within the United States.

Colonial records indicate that quail were present in southern New England 300 years ago, along with other upland natives including the ruffed grouse, wild turkey, and heath hen.

Leonard Lee Rue III: bobwhite

Quail are gregarious in nature throughout most of the year, forming coveys composed of broods raised in neighboring territories. Coveys are formed in late summer and hold together until spring just prior to the start of the mating season. The bobwhite is a ground nester with nesting activities usually under way by mid April. Nests are normally found in fairly open areas and not in thick woody edges or woodlots. An average of 12-15 creamy white eggs are deposited and incubated for 23-24 days, with both the male and the female actively involved. It is believed that native quail are not polygamous, but rather choose a mate to share the breeding responsibilities.

Approximately one-third of all nests started are successful. If nests are destroyed prior to hatching, the hens will usually re-nest and try again. Nest destruction or desertion can be caused by the elements (floods, fires, etc.) or by man, dogs, house cats, or other predators. Of the chicks that hatch, less than one-third survive to reach their first birthday.

Like all other wildlife species, quail have certain requirements which are crucial to survival. Adequate food, protective cover, water, dusting and roosting sites are important to the bobwhite. Food habits vary with season and the age of the bird, but in general insects, grain, and weed seeds make up the bulk of the diet. Insects provide protein, which is essential to the growth of young chicks. The seed portion of the quail's diet is usually associated with plowed agricultural fields or pastures.

Colonial quail populations held up fairly well in Connecticut until about 100 years ago, when diversified farming practices were replaced by specialization. Unlike the ruffed grouse, the bobwhite was detrimentally affected by changes in the environment brought about by settlement and economic shifts. When it became cheaper to transport grains from the mid-West than to produce them here, grain production in Connecticut dropped from an average of three acres per farm in 1880 to a fraction of an acre in the 1930's. Today it is almost non-existent. The decline, or in some case the disappearance, of the bobwhite in areas of Connecticut is often blamed on the gunner, pesticides, etc., when in actuality the cause lies with the changes in land use and farming practices.

Extreme weather conditions during winter months can be a decimating factor; however, natural reproduction usually brings the birds back to the normal carrying capacity of the habitat. This has been documented in annual quail surveys which are conducted in Connecticut and other states to monitor trends in populations.

Stocking pen-reared quail was an accepted management practice for many years. Prior to 1950, approximately 20,000 pen-reared quail were liberated by the Connecticut State Board of Fisheries and Game and sportsmen's clubs in an attempt to increase resident populations. It was only after this liberation program was discontinued that quail census figures began to increase. Recent studies have shown that pen-reared stock liberations are not beneficial in establishing populations, either economically or biologically. Bobwhite populations, along with those of other native species, most benefit by the management of the environment to make it best suit the needs of the particular species.

In summary, biologists tend to agree that changes in the abundance and distribution of quail in Connecticut have been brought about by several interrelating factors, the primary factor being the changes in farming practices throughout the state. The success of the bobwhite will continue to hinge on man's interaction with the environment in the years to come. ■

Recreation and Parks Month

Governor William A. O'Neill, on May 28, signed an official statement designating June 1981 as Recreation and Parks month in Connecticut.

Members of Connecticut's Recreation and Park Association will be working to increase citizens' awareness of the importance of recreation and exercise to everyday life. Their efforts are part of a larger campaign being launched by the National Recreation and Park Association through local park and recreation agencies. The campaign, called "Life. Be in it," is designed to promote participation in activities such as walking and stresses low-keyed, family-oriented ways of "getting people moving."

Above, Governor O'Neill signed the official statement in his office with (left to right) Dorothy Mullen, Director of the Northeast Service Center of the National Recreation and Park Association in Rocky Hill; Clark Schroeder, President of C.R.P.A. and Director of the Madison Parks and Recreation Department; Christy Hass, President-Elect of C.R.P.A. and Director of the Rocky Hill Parks and Recreation Department; Richard Bartlem, Vice-President of C.R.P.A. and Director of the Cheshire Parks and Recreation Department; and Robert Dlugolenski, Coordinator of the State Park and Recreation Advisory Service for the Connecticut Department of Environmental Protection. ■

Educational canoe trips

By Audrey Handelman,
Environmental Intern

This summer DEP's Parks and Recreation Unit will be opening up some of Connecticut's waters in a new way with a pilot program of educational canoe trips at Rocky Neck and Hopeville Pond State parks.

The trips, tentatively planned to start the week of June 20, are intended particularly for campers at the State parks and for interested outside groups, but other persons will be welcome. The Rocky Neck trips are scheduled for Mondays and Wednesdays; the Hopeville Pond trips for Tuesdays and Thursdays. If the program is successful, there will probably be similar trips at other parks later in the summer.

"We want to focus on the educational as well as the recreational aspects of these trips," says Steven Fish, head of Environmental Education for DEP. A pre-trip slide show is planned, and, while canoeing, participants will learn about such subjects as aquatic biology, natural history, and watersheds.

Seven to 10 canoes, with space for 14 to 20 people, will be furnished for each of the all-day trips. The cost will be $12 per person, which includes lunch and beverage.

North American Canoe Tours, Inc., will be running the tours. Based in Niantic, NACT guides tours on the Connecticut River regularly each summer as well as offering a "U-Paddle" service, renting canoes to individuals and groups by the hour, half-day, and day.

For more information or to register for these trips, call the camp managers at Rocky Neck State Park (739-5471) or Hopeville Pond State Park (376-0313). Trips will last six to eight hours. A minimum of ten persons will be required. Persons registering will be notified in case of cancellation. Cost for youngsters under 12 is $6. A flyer is available. ■

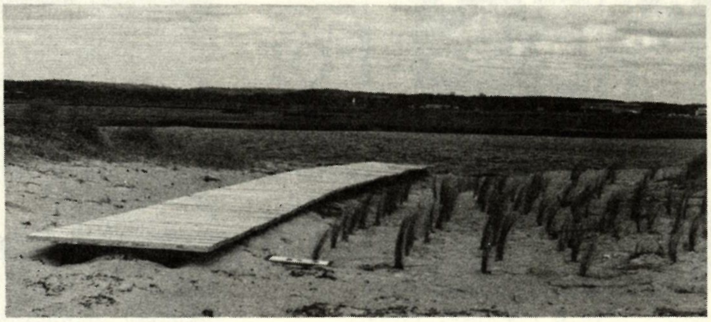
CAM NEWS

coastal area management
71 capitol avenue hartford conn. 06115

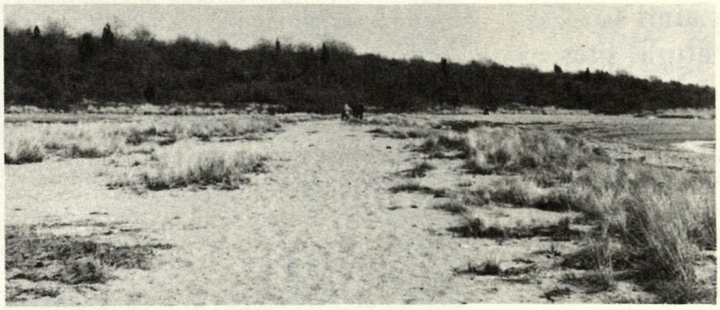
Beach grass stabilizes rare sand dunes

Sandy beaches are the most intensively used and abused coastal resources in Connecticut, primarily because the State has only 85 miles of sandy shore. Several types of sandy shores exist in Connecticut, but only the barrier beaches contain sandy beach and associated sand dunes. Only six large (one mile long) undeveloped barrier beaches contain natural dunes today. Since these beaches average 200 feet in width, the total acreage of natural dunes is approximately fifteen acres. In light of the rareness and fragility of dunes, the only viable management practice is to ensure maximum protection while minimizing uses that will destroy the dune's natural features.

Early last spring, the CAM Program, in conjunction with DEP's Parks & Recreation Unit, initiated a project to help restore and protect the dunes at Bushy Point Beach in Groton, which is part of Bluff Point State Park. Using funds from the U.S. Department of Commerce, Coastal Zone Management Office, the conservation project planted beach grass to help stabilize the dunes from wind erosion, placed snow fences to add additional stability to the dunes, and located small boardwalks to improve access while preventing pedestrians from trampling the newly planted and existing grass. Over 75 people took part, including staff members from Parks & Recreation, DEP's Natural Resources Center, and CAM, along with volunteers from the environmental education group, Project Oceanology. The photos, taken by CAM biologist Ron Rozsa, show some of our State's rare dunes and beaches and document the recent work to improve them. ■



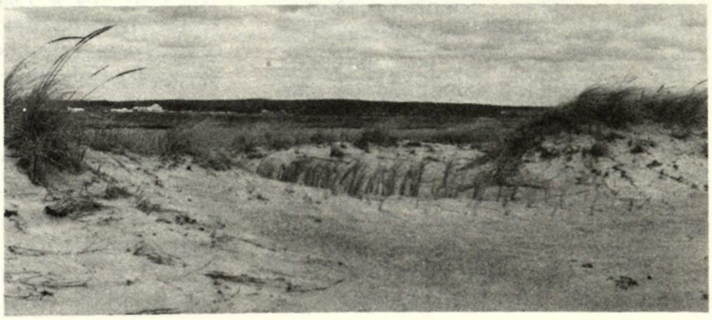
Clumps of beach grass, Ammophila breviligulata, right after planting, along with a board walk.



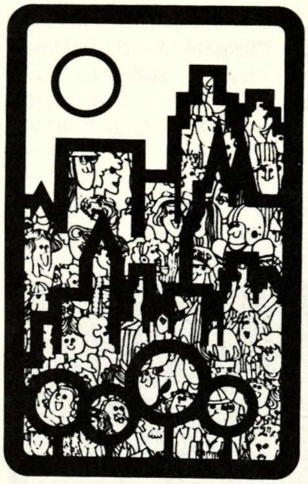
Sandy pathway shows where pedestrians have destroyed beach grass. Pedestrians account for large portion of destruction.

DEP staff members planting beach grass.

DEP staff member plants grass near top of a dune.



Existing and newly planted beach grass seen absorbing wind and protecting sand from erosion.



For Your Information

By Martina Delaney,
Citizens' Participation Coordinator

Heritage program aims to preserve unique natural sites

The following article by Sara Fried, of DEP's Natural Resources Center, provides background on the Connecticut Natural Heritage Program and the Natural Areas Inventory Questionnaire which has been sent by the CNHP to the State's Conservation Commissions.

Natural Heritage Program

Though Connecticut may be the second smallest of the New England States, what it lacks in size it more than makes up for in diversity of landscape and richness of native flora and fauna. The newly formed Connecticut Natural Heritage Program (CNHP) is one of the first approaches of its type in the State to the preservation of our irreplaceable natural areas. The program's goals are to inventory, classify, and document the importance of these resources and to work to protect them in the most effective ways.

Similar programs have been successful in other New England states, as well as throughout the country, in providing a system of identification, evaluation, and protection for sites designated as natural areas. A major function of the CNHP will be to increase public awareness of Connecticut's resources and to foster a better understanding and appreciation of them.

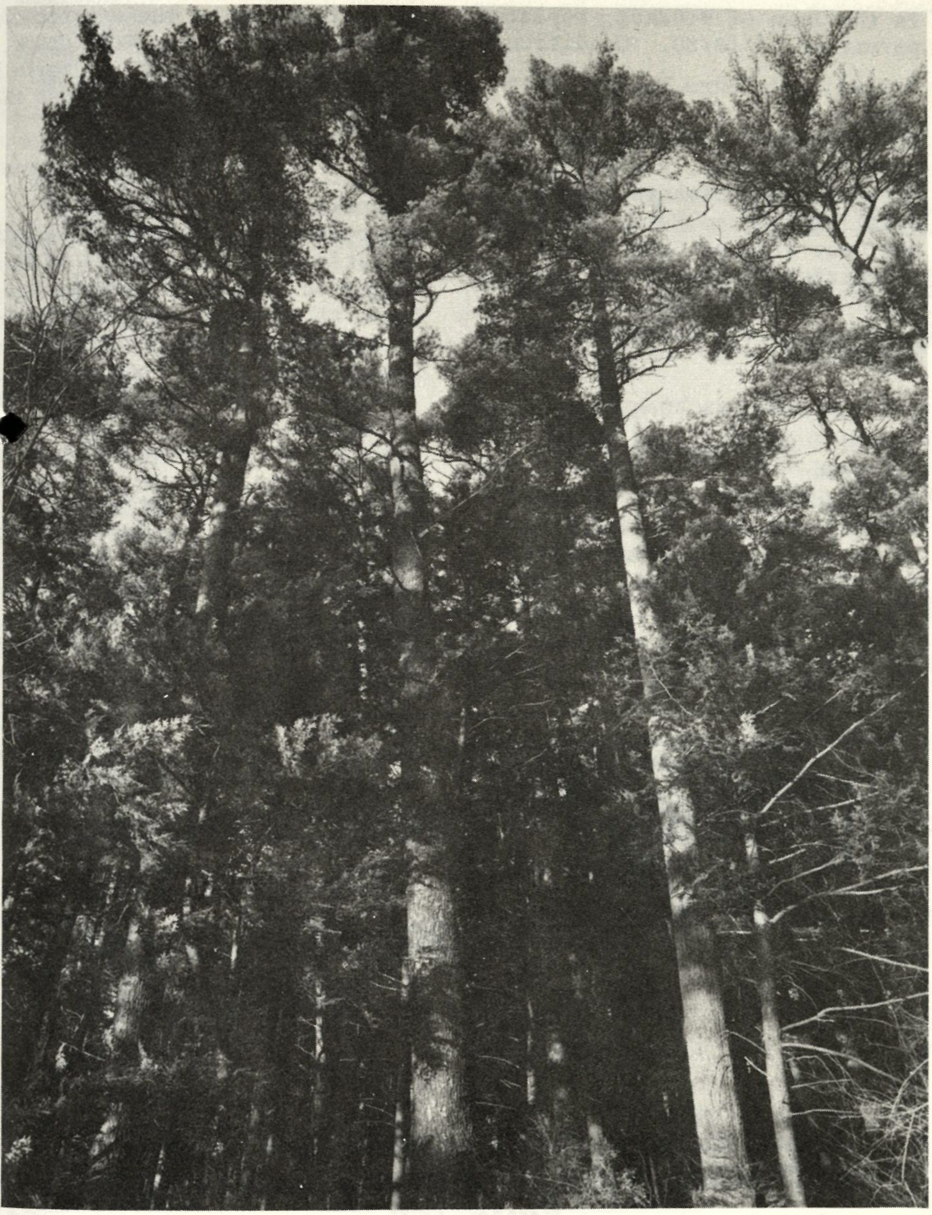
The idea of the heritage program is not really new to Connecticut. It is the union of several projects already under way that involve natural resource protection. Interest in this type of program began in 1972 with a natural area inventory conducted by the Yale School of Forestry and the Connecticut Forest and Park Association. The study identified and described over 450 natural areas, sites that were in some way unique or outstanding from a biologic, geologic, hydrologic, or archaeologic standpoint. A natural area might be a rare plant habitat, a former iron mine, or a stretch of floodplain forest. Though many of the natural areas identified fall on State-owned lands, the majority do not. Of these latter, many are held by private individuals who may be unaware of the significance of their properties. It is the intent of the CNHP to make sure that a valuable natural area is not inadvertently destroyed because its owner was unaware of its significance.

At present the Natural Resources Center of the DEP is responsible for the administration of all phases of the CNHP. The Center's first concern is that the original information gathered in the 1972 natural area inventory has been neither updated nor evaluated. Work is currently under way to update and reevaluate this data. As a result some areas may be eliminated because they have been destroyed or the quality of the site has deteriorated. New areas will also be added, and over 50 nominations have already been received.

The natural area inventory files, in their finished form, will contain information on the location, ownership, significance, surrounding land use, vulnerability, and references of each site. It is hoped that eventually these files can be cross referenced with an "elements file." With this system a person could either obtain site-specific information on one particular natural area such as Hammonassett Beach or could refer to the elements file under "natural beach and dune systems" for information on such areas and their distribution in the State.

The second phase of the Natural Heritage Program deals with the evaluation of the natural areas. The purpose of this evaluation is to maintain high standards for the natural area inventory and to facilitate the identification of high priority sites for protection. The system formerly used was biased in favor of highly vulnerable areas and tended to underrate sites of high quality that were not threatened. Although State decisions on areas of land to purchase may be influenced by the degree of threat, we feel this factor is best kept separate from the actual natural area selection process. For this purpose, a new evaluation system is being developed, and it will be used to decide what qualifies as a natural area and what our protection and management priorities are.

Another element of CNHP will be the formation of a State Registry of natural areas. The registry will be a non regulatory form of State recognition of the importance of certain high value, privately owned natural areas. The registry will afford some protection to areas included by decreasing the chance that a landowner might unwittingly destroy a natural area. Registration does not imply active State involvement with the protection or management of the listed site. Such assistance will be available but only if it is desired by the


Cathedral Pines, Cornwall: Connecticut Natural Areas Program

owner. The only commitment made by an owner is to give the State advance notice of any activities that might alter or decrease the value of the site as a natural area.

The former Natural Areas Preserves Advisory Committee has also been revived. The committee, composed of representatives from various preservation organizations throughout the State, was responsible for the selection and addition of lands to the Natural Areas Preserves System. The preserves system is backed by statute (CGS 23-5a) and states that a preserve must be put to its "highest, best and most important use for public benefit..." and shall not be put to any other use other than as a natural area preserve "... except upon a finding of public necessity." Over 2,000 acres of land have already been set aside as preserves. It is the intention of the CNHP to continue to add outstanding natural areas to this system.

The final phases of the CNHP, protection and management, occur only in conjunction with landowners or on State-owned lands. Protection involves the investigation of various preservation techniques and assistance to owners in determining the forms of protection best suited to their needs and circumstances.

The concept of management or commitment is the long range aspect of the CNHP. The management phase of the CNHP will include the formation of use guidelines for the natural areas. Management is used in the CNHP to maintain the areas preserved in a natural state and protect them from harmful man-induced perturbations. It is not used, except in a few instances, to inhibit or alter natural processes which may act on the site.

As a whole the CNHP provides the following advantages:

*CNHP acts as a centralized natural resources data bank, serving a wide range of users.

*CNHP helps to strike a balance between the State's need to preserve the best remaining natural areas while permitting the responsible development of the State's natural resources.

*CNHP aids in the coordination of preservation efforts of the various units of the DEP with those of private organizations and local conservation groups.

*CNHP is concerned with the preservation of the total range of natural diversity, not just those parts which are in immediate danger.

*CNHP establishes preservation priorities that focus attention on those areas most desirable to preserve as well as those most in need of preservation.

The CNHP will be coordinated with programs dealing with the State's historical and cultural heritage. Special emphasis will be given to those sites that combine all three values. Recommendations made to the legislature in January 1982 by the Heritage Task Force will serve to augment and strengthen the CNHP.

For more information about the CNHP, contact Sara Fried, Natural Resources Center, State Office Bldg., Hartford, CT 06115 or phone 566-3540. ■

Public Hearings

July 27, 1981; 10 a.m.
Rm. 221, State Office Bldg.,
Hartford
To consider the application of Teleco Oilfield Services, Inc., to discharge 12,650 gallons per day of domestic sewage to the City of Meriden sanitary sewerage system, originating from a proposed facility to be located between Research Parkway and Thorpe Avenue, just east of Bishops Pond.

July 28, 1981; 10 a.m.
Rm. 221, State Office Bldg.,
Hartford
To consider the application of The United Illuminating Company to discharge 144,000 gallons per day of non-contact cooling water, to be treated before discharge to meet applicable effluent limitations, to New Haven Harbor at 80 Temple Street in New Haven.

July 30, 1981; 10 a.m.
Rm. 221, State Office Bldg.,
Hartford
To consider the application of Klock, a Division of Gulf & Western Industries, Inc., to discharge 400 gallons per day of non-destructive testing wastewater from a liquid penetrant inspection process to the Town of Manchester sanitary sewerage system.

Permits Issued

Water Resources

Dam Construction

1/14/81: Lawrence W. Miller, West Hartford
To repair a dam on Trout Brook in West Hartford. Conditions.

1/22/81: City of Torrington
To construct a dike in Besse Pond in Torrington; replacement of permit of 11/10/80. Conditions.

2/24/81: Mr. Warren H. Liepold, Pawcatuck
To construct a dam on an unnamed tributary of the Pawcatuck River, west of Route 2 in the Town of Stonington. Conditions.

2/25/81: Department of Administrative Services, Bureau of Public Works, Hartford
To repair a dam on Bibbons Pond in the Town of Windham; replaces permit of 11/18/80. Conditions.

3/9/81: Florence Taylor, Portland
To restore an existing dam, to construct a dike, and to excavate accumulated sediments from an existing pond on Hales Brook on the west side of Conn. Route 17 immediately south of the intersection with Isinglass Hill Road in the Town of Portland. Conditions.

Encroachments

1/9/81: Mr. Theodore Traub, Watertown
Construction of a 60' by 120' masonry and steel building east of an existing building at 1401 Main Street (Route 63). Conditions.

2/2/81: Mr. Edward Quinlan, Winsted
Reconstruction of the existing wooden bridge across Wood Creek just east of Route 272 in Norfolk to gain access to land across the stream. Conditions.

2/4/81: Parks and Recreation Authority, Town of Portland
Maintenance of existing fill within wetlands and riverward of established stream encroachment lines at the existing ballfield at Brownstone Park in Portland. Conditions.

2/4/81: Mr. David Gillette, Windsor
Construction of a 24' by 36' barn behind the existing residence at 336 Palisado Avenue in Windsor, riverward of established stream channel encroachment lines for the Connecticut River. Conditions.

This Is Your Chance To Tell The Government What You Think...

About Burning Fuels to Heat Our Homes and Run Our Factories and the Resulting Air Pollution

Fossil fuels contain small amounts of sulfur as impurities. When we burn these fuels, we emit sulfur containing gases into the air as pollution. The Connecticut Department of Environmental Protection is proposing to increase the allowable amount of sulfur in fuel from 1/2% to 1%. Fuels that contain more sulfur are less expensive to use. We want to hear your views on this proposal. Public Hearings will be held at :

- **The Hall of the House, The State Capitol, Hartford, Ct. Wednesday, August 5, 1981, 11:00 a.m. - 3:00 p.m. 7:00 p.m. - 10:00 p.m.**
- **The Groton Municipal Building, Council Chambers, 295 Meridian St., Groton, Ct., Thursday, August 6, 1981, 10:00 a.m. - 2:00 p.m.**
- **Bridgeport City Hall, Common Council Chambers, 45 Lyon Terrace, Bridgeport, Ct., Thursday, August 6, 1981, 7:00 p.m. - 10:00 p.m.**

For more information, call the Connecticut Air Compliance Unit at 566-2268.
A written copy of your comments appreciated, but not required.

**WE ALL CREATE
AIR POLLUTION... NOW PLEASE BE PART OF THE SOLUTION**

Marine sport fishing

From page 13

of catches, largely because that data was extrapolated from DEP interviews plus information from random phone calls.

While anglers fishing from shore do catch adult bluefish, most shore-based success lies with snapper bluefish. Adult bluefish are vital to the charter and party boat industries of the State and account for the majority of the summer/[illegible]l effort. Conversely, snappers receive little fishing pressure from boat anglers who generally seek larger species in offshore areas. Snappers get short-term but intense fishing pressure from shore-based sport fishery of Connecticut. During August, they are sought by 35 percent of all anglers fishing in all modes combined. On certain days, better than 90 percent of the shore-based anglers were seeking snapper bluefish, and during August over 4,000 of the fish were caught by less than five hundred shore-based anglers. Snapper bluefish represented approximately 75 percent of the reported NMFS bluefish catch; however this catch did not differentiate between year classes.

Weakfish were sought by only 5 percent of all the anglers interviewed. An increased interest in weakfish angling is apparent from the reported catches of volunteer anglers between 1979 and 1980. During the 1979 season, these anglers reported catching 45 weakfish at a catch per unit effort of 1.8 fish/100 hours. During 1980 there were 143 weakfish reported and catch per effort nearly doubled to 3.0 fish for every 100 hours of fishing.

Connecticut sport and commercial scup landings during 1979 were 652,000 and 626,000 p[illegible]nds, respectively. Commercial fishermen took 768,000 pounds of flounder as compared to 421,393 pounds taken by recreational anglers. From this it is obvious that the numerous anglers with small catches made on rod and reel take a significant number of fish. ■

Help D.E.P. select Connecticut's major environmental problems for 1982 State/E.P.A. agreement

This agreement sets out key environmental issues under the Clean Air, Clean Water, Safe Drinking Water, and Resource Conservation and Recovery acts. Its goal is to maximize use of available resources to solve selected problems.

Public hearing: August 21, 10 a.m. Rm. 555, State Office Bldg., Hartford

Approximately 700 public officials, public interest groups, business and industry groups, and private citizens were sent the following questionnaire. Fill this one out and return it to: Tess Gutowski, Water Compliance Unit, DEP, 165 Capitol Ave., Hartford, CT 06115.

Please score the following environmental concerns in order of importance:

(1)	(2)	(3)	(4)	(5)
Highest Priority		Moderate Priority		Lowest Priority

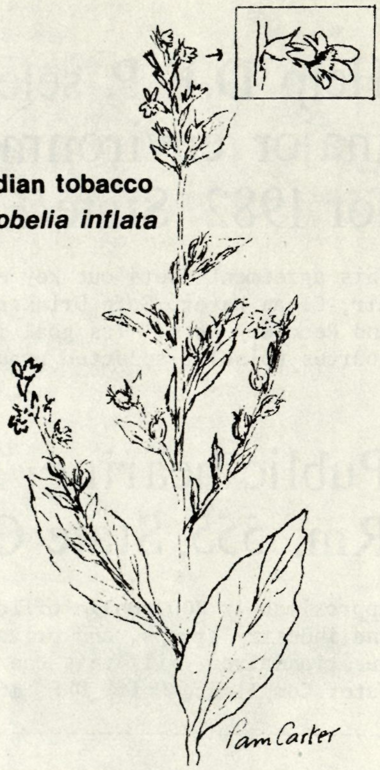
*______Protection of surface waters used for drinking water (serving 2/3s of State)
*______Protection of groundwaters used for drinking water (serving 1/3 of State)
*______Protection of surface waters for recreational uses, including fishing
*______Control of non-point sources of water pollution including agricultural wastes and erosion
*______Continuation of the Clean Lakes program
*______Control of public health problems associated with septic systems
*______Control of mobile sources of air pollution, implementation of motor vehicle emissions program
*______Control of air pollution from in-State stationary sources
*______Control of the interstate transport of air pollutants
*______"Acid rain" caused by interstate transport of air pollutants
*______Proper siting of new sanitary landfills
*______Proper operation and expansion of existing solid waste disposal areas
*______Planning, construction, and operation of regional resources recovery facilities which generate energy as well as recovering materials such as metals
*______State-wide system of source separation facilities
*______Regulation of existing hazardous waste facilities
*______Regulation of hazardous waste generators, industries, etc.
*______Responsibility for post-closing care of hazardous waste facilities

Trailside Botanizing

by G. Winston Carter

Many people who are interested in wild plants will no doubt be familiar with the Cardinal flower, Lobelia cardinalis, which may sometimes be found in wet spots along stream banks. Several years ago a curator from the New York Botanical Garden conducted a poll among naturalists to see which wild plant they considered the showiest, most interesting, and most conspicuous. The Cardinal flower came out the winner.

We tend to notice the showy, spectacular plants and fail to notice other plants which may also be interesting, because we have not sufficiently trained our powers of observation. Indian tobacco is a plant which illustrates this point. It is a close relative of the Cardinal flower, with the same basic flower pattern, but because it is much smaller and less conspicuous it is hardly noticed. The flower is rather pale blue, with two ear-like structures or lobes above and three similar lobes below, forming a lip. The name Lobelia inflata refers to the inflated seed pods which appear after the plant has completed flowering.



Indian tobacco
Lobelia inflata

Indian tobacco is our most common Lobelia and can grow in waste places, fields, pastures and woods. You may even find it as close to home as your own backyard, particularly if there are open woods nearby.

As its common name implies, our native Indian smoked its dried leaves, which apparently possess a taste somewhat similar to that of tobacco. It is said to be poisonous if eaten. The medicinal values associated with it apparently have been a kind of quack medicine.

DEP Citizens' Bulletin
State of Connecticut
Department of Environmental Protection
State Office Building
Hartford, Connecticut 06115

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